



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,073	11/21/2001	Koji Hiraki	216243US3	9752

22850 7590 08/27/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

GREEN, CHRISTY MARIE

ART UNIT PAPER NUMBER

3635

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,073

Applicant(s)

HIRAKI, KOJI

Examiner

Christy M Green

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is a second office action for serial number 09/989073, entitled Energy-Saving Housing, filed on November 21, 2001.

Claim Objections

Claims 4-7 and 17-27 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim and the claims must refer to a *preceding* claim. See MPEP § 608.01(n). It is suggested by the Examiner, that the terminology within claims 4-7: "...and Claims 8 through 16,...." should be eliminated in order to make the dependency of the all of the above stated claims proper. Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henley et al., US Patent # 4,852,310 in view of Kawanomoto et al., US patent # 6,247,747 and further in view of Hollemann, US patent # 4,301,859.

Henley discloses the claimed invention of an energy-saving housing including a **plurality of wall parts** including **an inner wall** (column 2, lines 50-52), a **plurality of ceiling/roof parts** (column 2, lines 48-50), and a clearance area (102). Henley does not

Art Unit: 3635

disclose the wall, ceiling/roof parts made from inorganic material and a heat insulator made from organic foamed material, a floor heating device provided at least at the floor part of the lower floor, and the clearance area is from $0.1 \text{ cm}^2/\text{m}^2$ to $0.95 \text{ cm}^2/\text{m}^2$ or $0.3 \text{ cm}^2/\text{m}^2$ to $0.6 \text{ cm}^2/\text{m}^2$. Kawanomoto teaches that it is known to provide the wall, ceiling/roof parts made from inorganic material and a heat insulator made from organic foamed material (column 7, lines 23-27). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the wall material of Kawanomoto with the walls of Henley in order to improve the heat insulating property of the whole of the panel and to lighten the weight of the panel (column 9, lines 44-49). Hollemann teaches that it is known to provide a floor heating device within housing (figure 1). It would have been obvious for one having ordinary skill in the art at the time the invention was made to provide the floor heating device of Hollemann with the housing of Henley in order to provide an optimum uniform heat distribution from the heating pipes to the floor (column 1, lines 63-65) and to provide a hot water surface heater which can be installed in existing rooms without difficulty (column 1, lines 31-34). In regards to the clearance area of the floor is from $0.1 \text{ cm}^2/\text{m}^2$ to $0.95 \text{ cm}^2/\text{m}^2$ or $0.3 \text{ cm}^2/\text{m}^2$ to $0.6 \text{ cm}^2/\text{m}^2$, it would have been an obvious matter of design choice to provide a clearance area of at least $0.1 \text{ cm}^2/\text{m}^2$ to $0.95 \text{ cm}^2/\text{m}^2$ or $0.3 \text{ cm}^2/\text{m}^2$ to $0.6 \text{ cm}^2/\text{m}^2$ in order to ensure there is room for ventilation between floor levels, and since applicant has not disclosed that these dimensions solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the clearance area as disclosed. Also, it has been held that where the general

conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or dimensions involves only routine skill in the art.

Claims 2 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henley et al. in view of Kawanomoto et al. in view of Hollemann, and further in view of Elson, US patent # 4,182,085.

Henley in view of Kawanomoto and further in view of Hollemann discloses the claimed invention as stated above in claim 1, except for ceiling parts with a heat transmission coefficient of $0.1 \text{ W/m}^2 \text{ K}$ through $0.7 \text{ W/m}^2 \text{ K}$ or $0.15 \text{ W/m}^2 \text{ K}$ through $0.35 \text{ W/m}^2 \text{ K}$. Elson teaches that it is known to provide ceiling parts with a heat transmission coefficient (column 1, lines 62-66). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the ceiling parts of Elson with the housing of Henley in view of Kawanomoto and further in view of Hollemann in order to reduce energy consumption in a building (column 1, lines 15-17). In regards to the values of the heat transmission coefficient, it would have been an obvious matter of design choice, since applicant has not disclosed that these values would solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the ceiling part of the invention cited above. Also, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or dimensions involves only routine skill in the art.

Claims 3 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henley et al. in view of Kawanomoto et al. in view of Hollemann, and further in view of D'Souza, US patent # 5,902,183.

Henley in view of Kawanomoto and further in view of Hollemann discloses the claimed invention as stated above in claim 1, except for a programmed ventilator. D'Souza teaches that it is known in the art to provide a programmed ventilator in housing (column 4, lines 13-16 and lines 35-41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the programmed ventilator of D'Souza with the housing of Henley in view of Kawanomoto in view of Hollemann in order to provide energy savings to the user and reduce air conditioning costs (column 4, lines 25-27).

Response to Arguments

Applicant's arguments filed 6/11/03 have been fully considered but they are not persuasive.

In regards to applicants argument that the panel and cargo compartment of Kawanomoto et al., has no suggestion for teaching that the structure shown can be utilized in a house of the type, the examiner recognizes this argument however, the panel used in the cargo compartment is suggested to be combinable because the cargo compartment is considered to be a housing type, although it is not a residential house, it is still used for housing components within the back of a truck, therefore it would be obvious to combine the panels of the references cited.

In regards to the applicants argument that the flooring in the Kawanomoto, which is used to teach the inorganic or organic heat insulating material, is not combinable since it is not the walls or a ceiling panel and would destroy either of the references for their intended purpose and function, the examiner recognizes the argument however, although Kawanomoto teaches a flooring panel to have the inorganic or organic heat insulating material, a flooring panel can also be used as a wall panel or a ceiling panel, and since the applicant does not get into the specifics on what the difference is between the floor, wall or ceiling panels in regards to how they are connected together, it is interpreted by the examiner that a floor panel with those properties as taught by Kawanomoto can be used within a wall or ceiling panel as taught by the other references Henly or Holleman as well as within the applicants invention. Also, In response to applicant's argument that this combination of references would destroy either of the references for their intended purpose and function, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In response to applicant's argument that there is no suggestion to combine the references, Elson and D'Souza, the examiner recognizes that obviousness can only be

Art Unit: 3635

established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The motivation for the rejection is found in the knowledge generally available to one of ordinary skill in the art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3635

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christy M Green whose telephone number is 703-308-9693. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on 703-308-0839. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


cg

August 22, 2003


Carl D. Friedman
Supervisory Patent Examiner
Group 3600